

MEN-4532

Managed Layer 2+ Aggregation Gigabit Ethernet Switch

20-slot 100FX/Gigabit SFP + 4-port 100/1000 Combo +
4-slot Gigabit SFP



Description

To provide better and performable Ethernet service to the customers, service providers need to extend their reach and offer high valued services while reducing both cost and complexity. Offering the helping hand, Volktek is designed MEN-4532 Managed L2+ Aggregation switch designed to meet the most demanding performance requirements of ISPs, MSOs and enterprises class network. Deployed next to core, the switch is designed with impressive yet simple-to-use management features, comprehensive QoS mechanisms and robust security functions to deliver more controlled services on a highly secure network.

Designed with ultimate combination of 20-slot 100FX/Gigabit, 4-port 100/1000 Combo and 4-Gigabit SFP, the MEN-4532 offers gigabit solution with high-speed connectivity to support high bandwidth requirements of large-scale networks such as campus, metropolitan IP and enterprise networks. Supported by SFP DDMI and Battery backup option, the MEN-4532 reduces the complexity in monitoring SFP parameters and increases device availability, much needed solutions for today's networking environments. Delivers maximum performance, power and reliability particularly for high density subscriber base with high ARPU, MEN-4532 is considered as a cost-effective and secure switching solution for quick expansion and growth of your network, protecting your network investments.

Features Highlight

Multicast Video Service Support

Deploying multicast applications such as IPTV has never been easier than before with comprehensive multicast traffic functions, IGMP snooping and MVR, in the MEN-4532. IGMP snooping regulates multicast traffic in a given VLAN and MVR operates with hosts on different VLANs in a Layer 2 network. These features on isolate the multicast streams and significantly reduce traffic from streaming media and other bandwidth-intensive IP multicast applications for better bandwidth. Thereby, the MEN-4532 supports applications that use multi-traffic in large scale across the network, saves network bandwidth, reduces operational burden and enhances the overall network performance.

Redundant Ring for Faster Network Recovery

Even few seconds of missed communications due to link failure can cause inconvenience and recovering it becomes very critical. Considering these threats, the MEN-4532 is designed with various ring protocols like STP, RSTP, MSTP, Xpress Ring and ERPS where the network failure is recovered in time scale of milliseconds. These features of the MEN-4532 provide a highly reliable network with redundancy connections whenever required and guarantee continuous network uptime.

Comprehensive Traffic Prioritization

Network applications need different levels of services delivered to them reliably without any transmission delays and interruptions. The MEN-4532 has comprehensive QoS mechanisms that assign priority to applications and send only specific dedicated traffic to them. In addition, bandwidth management functions of the switch allocate greater bandwidth for mission-critical communications. With increased control, administrators can prevent unpredictable errors and utilize the bandwidth more effectively.

Enhanced Control and Security

The MEN-4532 implements complete Layer 2 to Layer 4 ACLs to restrict access to your sensitive network resources by filtering specific packets based on TCP/UDP ports, source and destination IP addresses or particular network devices. Furthermore, DHCP snooping, TACACS+, ARP, IEEE 802.1X and Port Security provide additional tools to manage access and levels of use of network. These defence mechanisms of the MEN-4532 deliver robust network security and enables service providers to offer more stable services on a more secure network.

Efficient Network Monitoring and Proactive Capability

MEN-4532 is configured with both SNMP v1/v2c/v3 and RMON which give enhanced approaches for real-time traffic analysis, remote-monitoring and management of individual switches, this avoids high OPEX and increased efficiency and performance. The switch is assimilated with intelligent e-mail alarm system and SNMP Trap functionality to detect system abnormality along with faster troubleshooting. In addition to this, the device maintains a system log for the subsequent analysis of abnormal and unwanted flaws.

Unparalleled Network Performance

Excessive and unnecessary inbound unicast, multicast or broadcast traffic on physical interfaces can degrade your network performance and can even result in complete loss of network service. Storm control and traffic monitor features of the MEN-4532 enables ISPs to effectively monitor and limit incoming traffic to prevent disruption of LAN ports. In addition, loop detection on the switch identifies loops in the network and disables the relevant ports to avoid loop storms, preventing LAN degradation and achieving maximum network performance. These features along with auto-recovery timer deliver robotic methods to control your network automatically.

Features Highlight

Last-mile Investment Protection

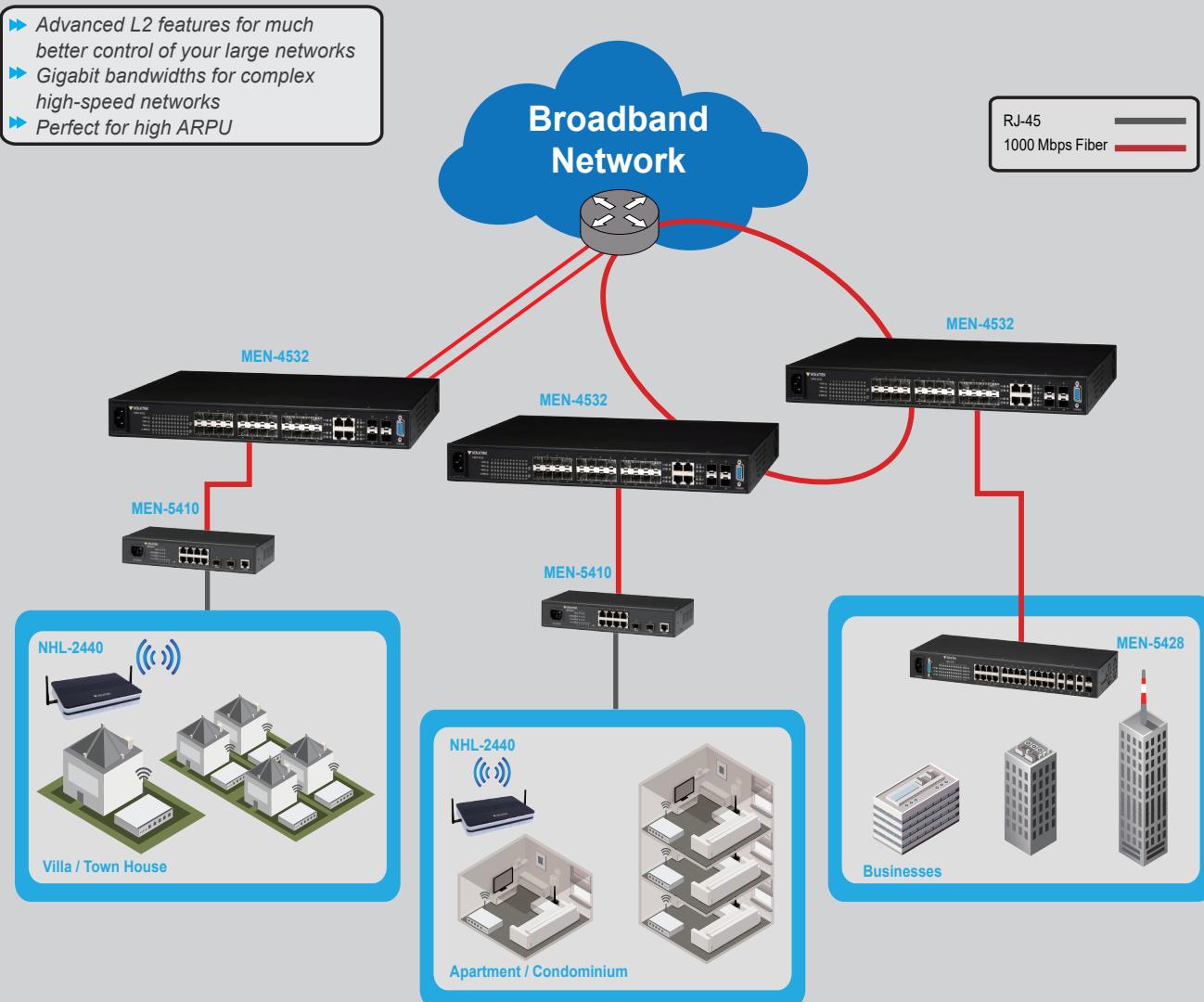
It is critically important for ISPs to protect their last-mile infrastructure from device thefts to avoid delays in delivering network services and loss of your investment. Focusing on this on-field hassle, the MEN-4532 is designed with Device Lock feature, a feature that locks your device to your network and will not function in any network other than its configured network. This innovative feature reduces device thefts and provides a continuous network connectivity saving your infrastructure investments.

Fine-grained Service Management

Beside basic port-based VLAN function, the MEN-4532 provides higher and flexible levels of VLAN configuration related to MAC and Protocol-based. While MAC-based comprises of defining a virtual network according to the MAC addresses of stations, the Protocol-based VLAN makes it possible to create a virtual network by protocol type. These features along with VLAN stacking enable ISPs to flexibly deliver services with extra security and separation. As a result, ISPs using the MEN-4532 can experience fine-grained service management fulfilling the requirements of their subscribers.

Application

Experience superior performance and massive bandwidths that deliver remarkable quality services



Aggregation Level

MEN-4532: 20-slot 100FX/Gigabit SFP, 4-port 100/1000 Combo + 4-slot Gigabit SFP Managed L2+ Aggregation Switch

Access Level

MEN-5428: 24-port 10/100/1000Base-T, 4 Gigabit Combo port Managed Access Switch

Access Level

MEN-5410: 8-port 10/100/1000Base-T, 2-slot Gigabit SFP Managed Access Switch

CPE

NHL-2440: 1-port 100/1000 WAN + 4 ports 10/100/1000 LAN 802.11n Wireless Router

Specifications

Features		Standards
Enhanced Function		IEEE 802.3 10Base-T
Hardware Monitor	Local Console	IEEE 802.3u 100Base-TX/FX
Code Redundancy	CLI through Console and Telnet	IEEE 802.3ab 1000Base-T
MSTP	Web-based GUI	IEEE 802.3z 1000Base-SX/LX
Xpress Ring	SNMP v1/v2c/v3	IEEE 802.3x Flow Control
Dual Homing	Port-based Mirroring	IEEE 802.3ad Link Aggregation
Protocol-based VLAN	System Log	IEEE 802.3 N-way Auto Negotiation
MAC-based VLAN	SNMP Trap	IEEE 802.1d STP
GARP/GVRP	Monitor alarm	IEEE 802.1w RSTP
ERPS (G.8032v1/v2)	Device Lock	IEEE 802.1s MSTP
IPoE (DHCP option 82)	DDMI support	IEEE 802.1p CoS Prioritization
IGMP Statistics/Group Filter	Firmware upgrade	IEEE 802.1q VLAN Tagging
IGMP Message Filter	Configuration Backup/Restore	IEEE 802.1x Port Authentication
MVR (Multicast VLAN Registration)	Management VLAN	IEEE 802.1ab LLDP
DHCP Relay	User Security	IEEE 802.1ad VLAN-Stacking
VLAN Translation	Static MAC Forwarding	IEEE 1588-2008 Precision Time Protocol (PTP)
DHCP Option 66/67	ARP Inspection	ITU-T G.8032v1/v2 Ethernet Ring Protection Switching (ERPS)
Auto Provisioning	ACL (L2/L3/L4)	Power
	DHCP Snooping	Input Voltage AC: 100~240V, 50~60Hz
		DC: 48V (MEN-4532D only)
	802.1x Port Authentication	Power Consumption TBD
	MAC Anti-Spoofing	Interface
Network Function		20-slot 100FX/GbE SFP
Loop detection with recover timer	TACACS+	4-port 100/1000 Combo
Static/LACP Trunking	Rate Limitation	4-slot GbE SFP
Spanning tree Protocol	Tag Based/Port-Based VLAN	1 x RS-232 Console (DB-9, female)
Rapid Spanning Tree Protocol	4K Active VLAN Support	Mechanical and Environment
IGMP Snooping v1/v2/v3	802.1p Priority Queues per port	Operating Temperature 0°C~50°C
VLAN Stacking (Q in Q)	Traffic Classification	Storage Temperature -20°C~70°C
DHCP Snooping	Network Storm Control	Operating Humidity 10 to 80% RH (non-condensing)
Flow Control	QoS Scheduler SP/WRR	Storage Humidity 5 to 90% RH (non-condensing)
Maximum Distances		Weight TBD
Copper	100 m	Dimensions 440x44x285mm (WxHxD)
Console	15 m	Ordering Information
SFP	Up to 110 Km	
Performance		MEN-4532 Managed Layer 2+ Aggregation Gigabit Ethernet Switch, 20-slot 100FX/Gigabit SFP + 4-port 100/1000 Combo + 4-slot Gigabit SFP
Throughput		MEN-4532D Managed Layer 2+ Aggregation Gigabit Ethernet Switch, 20-slot 100FX/Gigabit SFP + 4-port 100/1000 Combo + 4-slot Gigabit SFP
Switch Fabric		FPM-107 100Base-FX Multi-mode SFP, 2Km
L2 Forwarding		FPM-107-30 100Base-FX Single mode SFP, 30Km
MAC Table Size		GBM-132 100Base-FX Bi-di Single Mode SFP Module, 20Km
Packet buffer size		GBM-104 1000Base-SX 1.25G, Multi-mode SFP, 500m
Jumbo Frame Size		GBM-104-2 1000Base-SX 1.25G, Multi-mode, 3.3V, 1310nm, 2Km
		GBM-104-10 1000Base-LX 1.25G, Single mode SFP, 10Km
		GBM-123 1000Base-LX Bi-di Single Mode SFP Module, 10Km

*Specifications subject to change without notice.